

Public Health Preparedness and Situational Awareness Report: #2019:12

Reporting for the week ending 03/23/19 (MMWR Week #12)

March 29, 2019

CURRENT HOMELAND SECURITY THREAT LEVELS

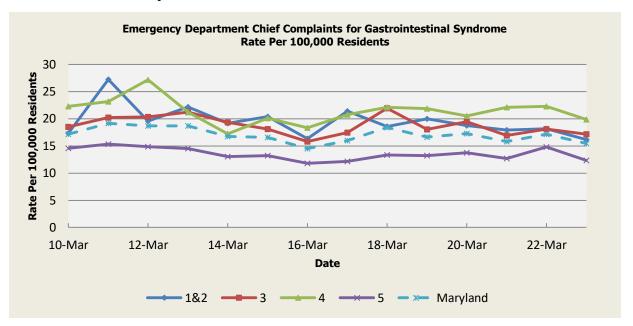
National: No Active Alerts

Maryland: Normal (MEMA status)

SYNDROMIC SURVEILLANCE REPORTS

ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics): Graphical representation is provided for all syndromes (excluding the "Other" category; see Appendix 1) by Health and Medical Regions (See Appendix 2). Emergency department chief complaint data is presented as rates per 100,000 residents using data from the 2010 census. Electronic Surveillance System for the Early Notification of Community-Based Epidemics (ESSENCE). Baltimore, MD: Maryland Department of Health; 2019.

Gastrointestinal Syndrome

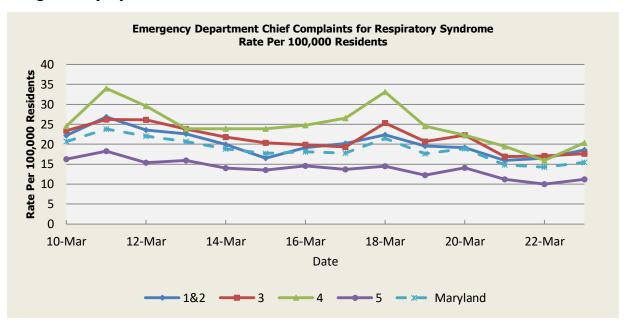


There were four (4) Gastrointestinal Syndrome outbreaks reported this week: one (1) outbreak of Gastroenteritis in a Nursing Home (Region 3); two (2) outbreaks of Gastroenteritis in Assisted Living Facilities ((Region 3); one (1) outbreak of Gastroenteritis/Foodborne associated with a Restaurant (Region 5).

	Gastrointestinal Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland	
Mean Rate*	13.17	15.08	15.84	10.20	13.11	
Median Rate*	13.11	14.87	15.46	10.08	12.97	

^{*} Per 100,000 Residents

Respiratory Syndrome

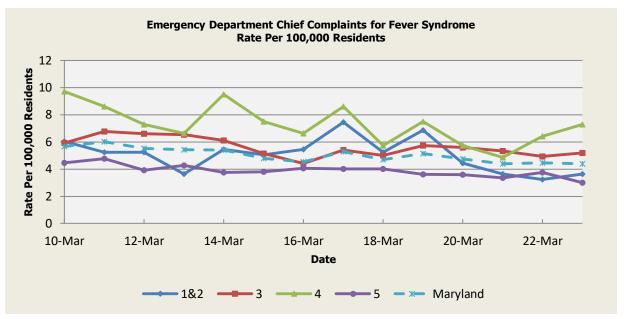


There were eight (8) Respiratory Syndrome outbreaks reported this week: three (3) outbreaks of Influenza in Nursing Homes (Regions 1&2, 4); two (2) outbreaks of Influenza in Assisted Living Facilities; one (1) outbreak of Influenza associated with a Daycare Center (Region 4); one (1) outbreak of Influenza/Pneumonia in an Assisted Living Facility (Region 5); one (1) outbreak of ILI/Pneumonia in a Nursing Home (Region 3).

	Respiratory Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland	
Mean Rate*	12.62	14.71	15.04	9.97	12.75	
Median Rate*	12.10	14.14	14.35	9.60	12.25	

^{*} Per 100,000 Residents

Fever Syndrome

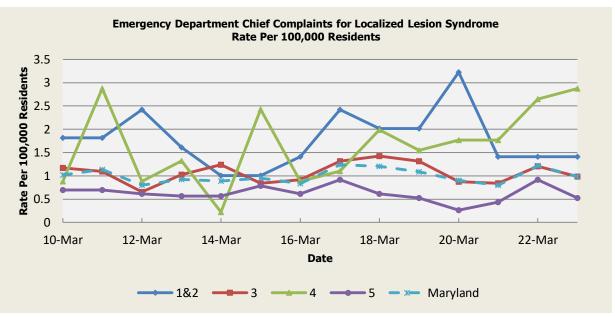


There were no Fever Syndrome outbreaks reported this week.

	Fever Syndrome Baseline Data January 1, 2010 - Present				
Health Region	1&2	3	4	5	Maryland
Mean Rate*	3.06	3.89	4.09	3.04	3.51
Median Rate*	3.02	3.76	3.97	2.92	3.38

*Per 100,000 Residents

Localized Lesion Syndrome

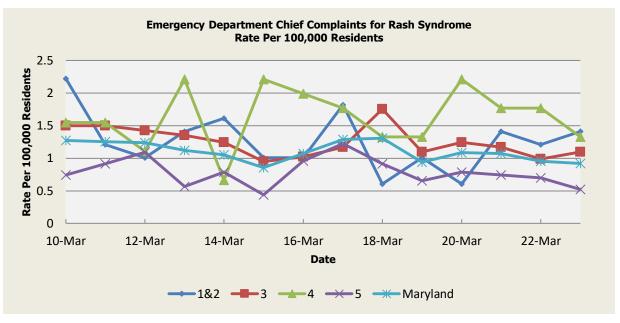


There were no Localized Lesion Syndrome outbreaks reported this week.

	Local	Localized Lesion Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland		
Mean Rate*	1.10	1.80	2.04	0.91	1.42		
Median Rate*	1.01	1.75	1.99	0.87	1.37		

^{*} Per 100,000 Residents

Rash Syndrome

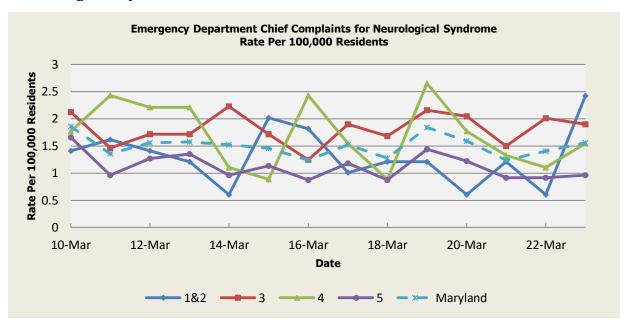


There were no Rash Syndrome outbreaks reported this week.

	Rash Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland	
Mean Rate*	1.22	1.68	1.76	0.98	1.38	
Median Rate*	1.21	1.61	1.77	0.96	1.32	

^{*} Per 100,000 Residents

Neurological Syndrome

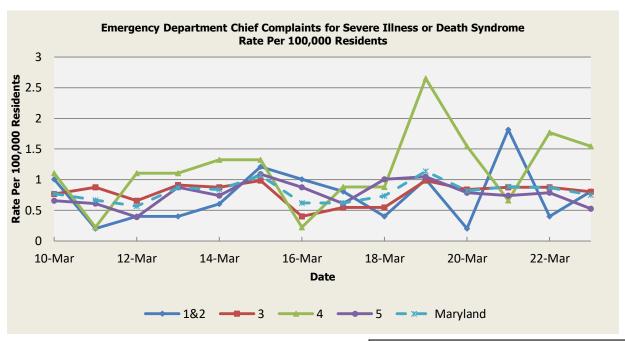


There were no Neurological Syndrome outbreaks reported this week.

	Neurological Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland	
Mean Rate*	0.76	0.92	0.84	0.58	0.77	
Median Rate*	0.60	0.80	0.66	0.52	0.67	

^{*} Per 100,000 Residents

Severe Illness or Death Syndrome



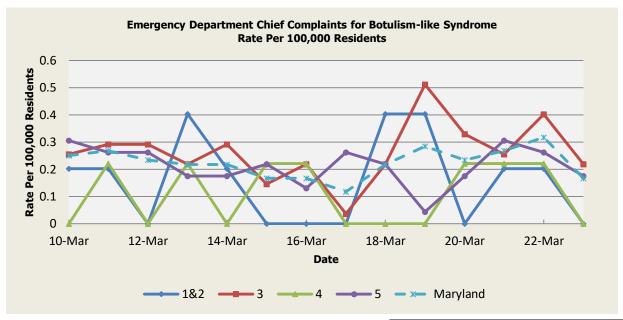
There were no Severe Illness or Death Syndrome outbreaks reported this week.

	Severe Illness or Death Syndrome Baseline Data January 1, 2010 - Present						
Health Region	1&2	3	4	5	Maryland		
Mean Rate*	0.66	0.90	0.83	0.50	0.72		
Median Rate*	0.60	0.88	0.66	0.48	0.69		

* Per 100,000 Residents

SYNDROMES RELATED TO CATEGORY A AGENTS

Botulism-like Syndrome

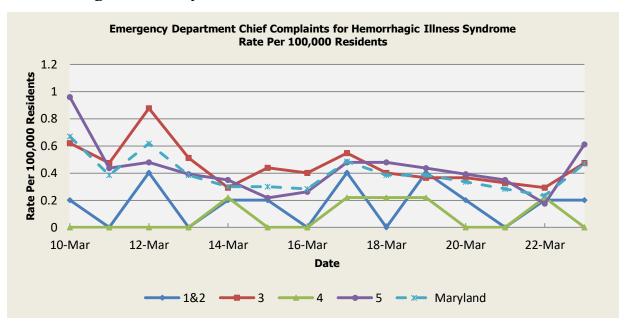


There was an appreciable increase above baseline in the rate of ED visits for Botulism-like Syndrome on 3/10 (Regions 1&2,3,5), 3/11 (Regions 1&2,3,4,5), 3/12 (Regions 3,5), 3/13 (Regions 1&2,4,5), 3/14 (Regions 1&2,3,5), 3/15 (Regions 4,5), 3/16 (Region 4), 3/17 (Region 5), 3/18 (Regions 1&2,5), 3/19 (Regions 1&2,3), 3/20 (Regions 3,4), 3/21 (Regions 1&2,3,4,5), 3/22 (Regions 1&2,3,4,5), 3/23 (Region 5). These increases are not known to be associated with any outbreaks.

	Botulism-like Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	Maryland				
Mean Rate*	0.07	0.12	0.05	0.07	0.09	
Median Rate*	0.00	0.07	0.00	0.04	0.07	

* Per 100,000 Residents

Hemorrhagic Illness Syndrome

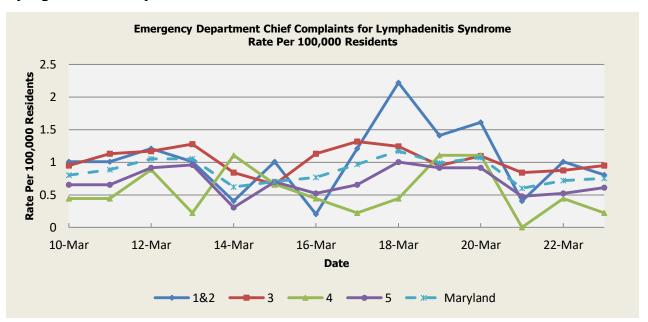


There was an appreciable increase above baseline in the rate of ED visits for Hemorrhagic Illness Syndrome on 3/10 (Regions 1&2,3,5), 3/11 (Regions 3,5), 3/12 (Regions 1&2,3,5), 3/13 (Region 3,5), 3/14 (Regions 1&2,4,5), 3/15 (Regions 1&2,3), 3/16 (Regions 3,5), 3/17 (Regions 1&2,3,4,5), 3/18 (Regions 3,4,5), 3/19 (Regions 1&2,3,4,5), 3/20 (Regions 1&2,3,5), 3/21 (Regions 3,5), 3/22 (Regions 1&2,4), 3/23 (Regions 1&2,3). These increases are not known to be associated with any outbreaks.

	Hemorrhagic Illness Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland	
Mean Rate*	0.04	0.15	0.04	0.12	0.12	
Median Rate*	0.00	0.07	0.00	0.04	0.07	

^{*} Per 100,000 Residents

Lymphadenitis Syndrome



There was an appreciable increase above baseline in the rate of ED visits for Lymphadenitis Syndrome on 3/10 (Regions 1&2), 3/11 (Regions 1&2), 3/12 (Regions 1&2,3,5), 3/13 (Regions 1&2,5), 3/14 (Region 4), 3/15 (Regions 1&2), 3/17 (Regions 1&2), 3/18 (Regions 1&2,5), 3/19 (Regions 1&2,4,5), 3/20 (Regions 1&2,4,5), 3/22 (Regions 1&2), 3/23 (Regions 1&2). These increases are not known to be associated with any outbreaks.

	Lymphadenitis Syndrome Baseline Data January 1, 2010 - Present						
Health Region	1&2	3	4	5	Maryland		
Mean Rate*	0.35	0.57	0.39	0.37	0.46		
Median Rate*	0.20	0.47	0.44	0.31	0.40		

* Per 100,000 Residents

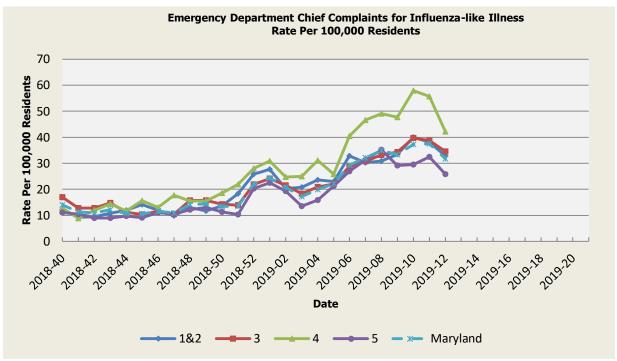
MARYLAND REPORTABLE DISEASE SURVEILLANCE

Reportable disease data from the National Electronic Disease Suffeeds into ESSENCE is currently being validated. We will include once the validation process is complete.	
	(report continues on next page)

SYNDROMIC INFLUENZA SURVEILLANCE

Seasonal Influenza reporting occurs from MMWR Week 40 through MMWR Week 20 (October 2018 through May 2019). Seasonal Influenza activity for Week 12 was: Moderate Intensity and Widespread geographic activity.

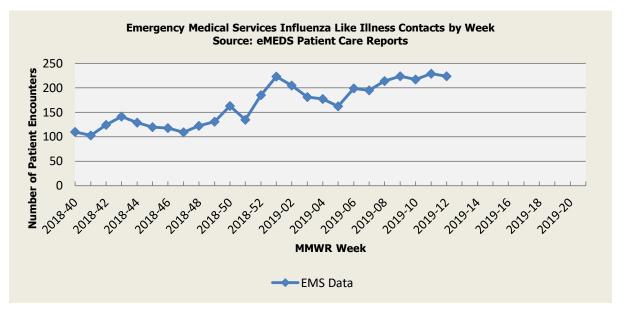
Influenza-like Illness



	Influenza-like Illness Baseline Data Week 1 2010 - Present					
Health Region	1&2	3	4	5	Maryland	
Mean Rate*	10.13	13.29	12.84	11.27	12.22	
Median Rate*	7.66	10.19	9.27	8.64	9.25	

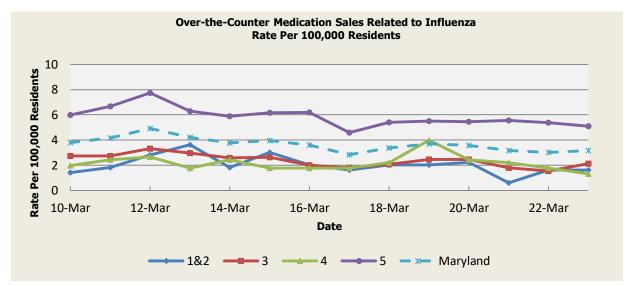
^{*} Per 100,000 Residents

Influenza-like Illness Contacts by Week



Disclaimer on eMEDS flu related data: These data are based on EMS Pre-hospital care reports where the EMS provider has selected "flu like illness" as a primary or secondary impression of a patient's illness. This impression is solely based on the signs and symptoms seen by the provider, not on any diagnostic tests. Since these numbers do not include all primary or secondary impressions that may be seen with influenza the actual numbers may be low. These data are reported for trending purposes only.

Over-the-Counter Influenza-Related Medication Sales

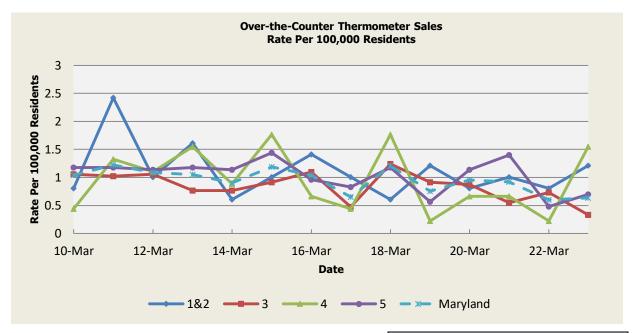


There was not an appreciable increase above baseline in the rate of OTC thermometer sales during this reporting period.

	OTC Medication Sales Baseline Data January 1, 2010 - Present				
Health Region	1&2	3	4	5	Maryland
Mean Rate*	3.60	4.64	2.74	8.08	5.73
Median Rate*	2.82	3.84	2.43	7.42	5.02

^{*} Per 100,000 Residents

Over-the-Counter Thermometer Sales



There was not an appreciable increase above baseline in the rate of OTC thermometer sales during this reporting period.

	Thermometer Sales Baseline Data January 1, 2010 - Present				
Health Region	1&2	3	4	5	Maryland
Mean Rate*	3.08	2.94	2.33	3.90	3.27
Median Rate*	2.82	2.78	2.21	3.75	3.15

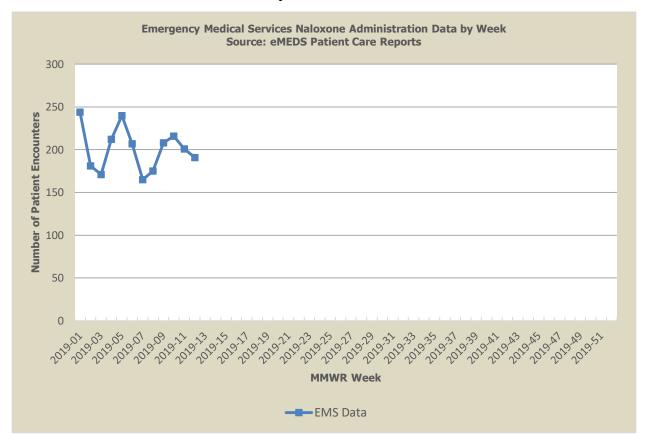
^{*} Per 100,000 Residents

SYNDROMIC OVERDOSE SURVEILLANCE

The purpose of this section is to characterize non-fatal ED visit trends for acute unintentional overdose by Heroin, Opioid or Unspecified substance among Maryland residents captured by ESSENCE data, including chief complaint and discharge diagnosis. ED visits that are identified as unintentional overdose by Heroin, Opioid or Unspecified substance include those with medical and non-medical use of a prescription Opioid or where the substance is not specified, given evidence that most fatal overdoses are Opioid-related.

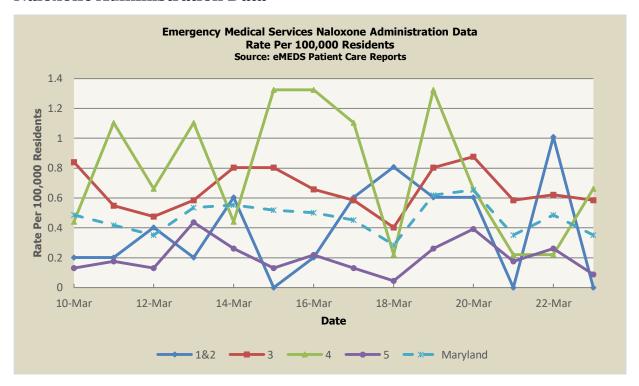
In preparation for the release of new ESSENCE queries for identifying heroin, opioid and all drug overdoses, please note that we have removed the data chart showing unintentional overdose rates by heroin, opioid, or unspecified substances. These new data, when available, will be presented below.

Naloxone Administration Data by Week



Disclaimer on eMEDS naloxone administration related data: These data are based on EMS Pre-hospital care reports where the EMS provider has documented that they administered naloxone. The administration of naloxone is based on the patient's signs and symptoms and not on any diagnostic tests. These data are reported for trending purposes only.

Naloxone Administration Data



Disclaimer on eMEDS Naloxone administration related data: These data are based on EMS Pre-hospital care reports where the EMS provider has documented that they administered naloxone. The administration of naloxone is based on the patient's signs and symptoms and not on any diagnostic tests. These data are reported for trending purposes only.

PANDEMIC INFLUENZA UPDATE / AVIAN INFLUENZA-RELATED REPORTS

WHO update: The current WHO phase of pandemic alert for avian influenza is ALERT. Currently, the avian influenza H5N1 virus continues to circulate in poultry in some countries, especially in Asia and northeast Africa. This virus continues to cause sporadic human infections with some instances of limited human-to-human transmission among very close contacts. There has been no sustained human-to-human or community-level transmission identified thus far.

Influenza A (H7N9) is one of a subgroup of influenza viruses that normally circulate among birds. Until recently, this virus had not been seen in people. However, human infections have now been detected. Presently, there is limited information about the scope of the disease the virus causes and about the source of exposure. The disease is of concern because most patients have been severely ill. There is no indication thus far that it can be transmitted between people, but both animal-to-human and human-to-human routes of transmission are being actively investigated.

Alert phase: This is the phase when influenza caused by a new subtype has been identified in humans. Increased vigilance and careful risk assessment, at local, national, and global levels are characteristic of this phase. If the risk assessments indicate that the new virus is not developing into a pandemic strain, a de-escalation of activities towards those in the interpandemic phase may occur. As of March 28, 2019, the WHO-confirmed global total (2003-2019) of human cases of H5N1 avian influenza virus infection stands at 860, of which 454 have been fatal. Thus, the case fatality rate for human H5N1 is approximately 53%.

AVIAN INFLUENZA

There were no relevant avian influenza reports this week.

HUMAN AVIAN INFLUENZA

There were no relevant human avian influenza reports this week.

NATIONAL DISEASE REPORTS

VIM-PRODUCING PSEUDOMONAS AERUGINOSA (CALIFORNIA, MEXICO), 27

Mar 2019, Two people in San Diego county [California, USA] remain hospitalized and 1 person is under care at a nursing facility after contracting a potentially deadly superbug infection at a Tijuana [Baja California, Mexico] hospital. "Right now these patients are treatable, but we want to make sure no one else gets that infection," said Eric McDonald, MD, medical director of epidemiology for the county of San Diego. "All of the patients who were hospitalized in San Diego had their infections recognized early and were treated with the appropriate infection precautions." Read More: http://www.promedmail.org/post/6389173

MUMPS (**PENNSYLVANIA**), 22 Mar 2019, Two vaccine clinics will be held at Philadelphia's Temple University in response to the ongoing mumps outbreak at the school that's now up to at

least 93 cases. The city's public health department said the MMR vaccine, for measles, mumps, and rubella, will be available to all Temple students, faculty and staff [27 and 29 Mar 2019] from 9 a.m. to 4 p.m. Read More: http://www.promedmail.org/post/6384687

VARICELLA (NEW MEXICO), 22 Mar 2019, Health officials at a prison in southern New Mexico are working to stop the spread of chickenpox. Some inmates at the Otero County prison have been placed in quarantine. The prison said one inmate was diagnosed with chickenpox and staff acted quickly as a precaution. As of Thursday [21 Mar 2019], there is only one confirmed case. Just off Highway 54 in New Mexico, you can see some inmates out enjoying a sunny spring day. What you don't see is others in isolation who may have been exposed to chickenpox. Read More: http://www.promedmail.org/post/6382502

INTERNATIONAL DISEASE REPORTS

KYASANUR FOREST DISEASE (**INDIA**), 25 Mar 2019, Kyasanur Forest disease (KFD) or monkey fever has claimed one life in Wayanad [district in Kerala state], marking it the 1st KFD death in the state after 2015. [S] aged (27), a resident of the Begur tribal hamlet, died at the Kozhikode Medical College Hospital Saturday night [23 Mar 2019]. He was admitted to the Mananthavady district hospital on [10 Mar 2019] with symptoms of the disease and was later referred to the medical college. Read More: http://www.promedmail.org/post/6386889

VARICELLA (PHILIPPINES), 20 Mar 2019, A public elementary school in Tubungan town, Iloilo has recorded a total of 36 chickenpox cases from 15 Jan to 3 Mar [2019], the Provincial Health Office (PHO) said. In an interview on 20 Mar 2019, Dr. Patricia Grace Trabado, PHO head, said the cases were observed as patients who sought treatment at the rural health units (RHU) and private clinics in Tubungan. All the cases were recorded in Cadabdab Elementary School, with 21 male and 15 female students affected. Trabado said affected pupils might still be attending school even though they were infected, which resulted in its transmission. Read More: http://www.promedmail.org/post/6382502

OTHER RESOURCES AND ARTICLES OF INTEREST

More information concerning Public Health and Emergency Preparedness can be found at the Office of Preparedness and Response website: http://preparedness.health.maryland.gov/ or follow us on Facebook at www.facebook.com/MarylandOPR.

More data and information on influenza can be found on the MDH website: http://phpa.health.maryland.gov/influenza/fluwatch/Pages/Home.aspx

Please participate in the Maryland Resident Influenza Tracking System (MRITS): http://flusurvey.health.maryland.gov

NOTE: This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

For questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail us. If you have information that is pertinent to this notification process, please send it to us to be included in the routine report.

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Appendix 1: ESSENCE Syndrome Definitions and Associated Category A Conditions

Syndrome	ESSENCE Definition	Category A Conditions
Botulism-like	(Botulism or (DifficultyFocusing and DifficultySpeaking) or (DifficultySpeaking and DifficultySwallowing) or (DifficultySwallowing and DifficultyFocusing) or DoubleVision or FacialParalysis or GuillainBarre or Ptosis) and not GeneralExclusions	Botulism
Fever	(Chills or (FeverPlus and (Drowsiness or Seizure)) or FeverOnly or SepsisGroup or ViralSyndrome) and not GeneralExclusions	N/A
Gastrointestinal	(AbdominalCramps or AbdominalPainGroup or Diarrhea or FoodPoisoning or Gastroenteritis or GIBleeding or Peritonitis or Vomiting) and not (GeneralExclusions or Gynecological or Obstetric or Reproductive or UrinaryTract)	Anthrax (gastrointestinal)
Hemorrhagic Illness	(FeverOrChills and (AcuteBloodAbnormalitiesGroup or BleedingFromMouth or BleedingGums or GIBleeding or Hematemesis or Hemoptysis or Nosebleed or Petechiae or Purpura)) and not GeneralExclusions	Viral Hemorrhagic Fever
Localized Lesion	(Boils or Bump or Carbuncle or DepressedUlcer or Eschar or Furuncle or InsectBite or SkinAbscess or (SkinSores and not AllOverBody) or SkinUlcer or SpiderBite) and not (GeneralExclusions or Decubitus or Diabetes or StasisUlcer)	Anthrax (cutaneous) Tularemia
Lymphadenitis	(BloodPoisoning or Bubo or CatScratchDisease or SwollenGlands) and not GeneralExclusions	Plague (bubonic)
Neurological	(([Age<75] and AlteredMentalStatus) or (FeverPlus and (Confusion or Drowsiness or Petechiae or StiffNeck)) or Delirium or Encephalitis or Meningitis or UnconsciousGroup) and not GeneralExclusions	N/A
Rash	(ChickenPox or Measles or RashGeneral or Roseola or (Rubella and not Pregnancy) or Shingles or (SkinSores and AllOverBody) or Smallpox) and not GeneralExclusions	Smallpox
Respiratory	(Anthrax or Bronchitis or (ChestPain and [Age<50]) or Cough or Croup or DifficultyBreathing or Hemothorax or Hypoxia or Influenza or Legionnaires or LowerRespiratoryInfection or Pleurisy or Pneumonia or RespiratoryDistress or RespiratoryFailure or RespiratorySyncytialVirus or RibPain or ShortnessOfBreath or Wheezing) and not (GeneralExclusions or Cardiac or (ChestPain and Musculoskeletal) or Hyperventilation or Pneumothorax)	Anthrax (inhalational) Tularemia Plague (pneumonic)
Severe Illness or Death	CardiacArrest or CodeGroup or DeathGroup or (Hypotension and FeverPlus) or RespiratoryArrest or SepsisGroup or Shock	N/A

Appendix 2: Maryland Health and Medical Region Definitions

Health and Medical Region	Counties Reporting to ESSENCE		
	Allegany County		
Dagions 1 & 2	Frederick County		
Regions 1 & 2	Garrett County		
	Washington County		
	Anne Arundel County		
	Baltimore City		
Pagion 2	Baltimore County		
Region 3	Carroll County		
	Harford County		
	Howard County		
	Caroline County		
	Cecil County		
	Dorchester County		
	Kent County		
Region 4	Queen Anne's County		
	Somerset County		
	Talbot County		
	Wicomico County		
	Worcester County		
	Calvert County		
	Charles County		
Region 5	Montgomery County		
	Prince George's County		
	St. Mary's County		

